

IN THE CLAIMS:

Claims 1, 7, 13 have been amended. Claims 4 - 6, 19 - 21, 24 - 25, 28 - 29, and 32 - 33 have been cancelled. Claims 34 - 42 have been added.

1. (Currently amended) A router comprising:

a routing component that implements IP routing protocols for data processed by the router, wherein a workstation functions as the router via the IP routing protocols; and

an interface component for a user to view and modify dynamic routing protocol features of the router in real-time, wherein the router utilizes a real-time operating system, the interface component displaying the features of the router to the user as a hierarchical tree having attributes that store values relating to the IP routing protocols and components that represent functionality of the IP routing protocols, the components containing one or more sub-components or attributes, the attributes being modifiable within a single initialization of the router, one of the attributes indicating a priority of a dynamic routing protocol designated router election for a local network and the hierarchical tree displaying the attributes, the components, and the subcomponents to the user.

2. (Original) The router of claim 1, wherein the interface component is accessible by a user through a command-line interface.

3. (Original) The router of claim 1, wherein the interface component is accessible by a user through a graphical interface.

Claims 4 - 6 (cancelled).

7. (Currently amended) A method comprising:

implementing IP routing protocols for data processed by a router, wherein a workstation functions as the router via the IP routing protocols;

organizing features relating to routing protocols of the router into a hierarchically formatted component tree, the features including attributes that store values relating to the IP routing protocols and components that represent functionality of the IP routing protocols;

displaying a portion of the hierarchically formatted component tree to a user in response to a first command from the user, wherein the hierarchically formatted component tree displays the attributes, the components, and sub-components of the components;

modifying the component tree in response to a second command from the user, wherein the attributes are modifiable within a single initialization of the router; and

updating, in real-time, features of the router relating to the routing protocol that were changed by the user when modifying the component tree,

wherein the router utilizes a real-time operating system and one of the attributes indicates a priority of a dynamic routing protocol designated router election for a local network.

8. (Original) The method of claim 7, wherein the hierarchical component tree includes attributes that store values relating to the routing protocols and components that represent functionality of the routing protocols, the components containing one or more sub-

components or attributes.

9. (Original) The method of claim 7, wherein the first command is a display command.

10. (Original) The method of claim 7, wherein the second command is a set preference command.

11. (Original) The method of claim 7, wherein the user inputs the first and second commands via a command-line interface.

12. (Original) The method of claim 7, wherein the user inputs the first and second commands via a graphical interface.

13. (Currently amended) A computer readable medium containing instructions for execution by a processor, the instructions, when executed:

implementing IP routing protocols for data processed by a router, wherein a workstation functions as the router via the IP routing protocols;

organizing features relating to routing protocols of the router into a hierarchically formatted component tree, the features including attributes that store values relating to the IP routing protocols and components that represent functionality of the IP routing protocols;

displaying a portion of the hierarchically formatted component tree to a user in response to a first command from the user, wherein the hierarchically formatted component tree displays the attributes, the components, and sub-components of the components;

modifying the component tree in response to a second command from the

user, wherein the attributes are modifiable within a single initialization of the router; and

updating, in real-time, features of the router relating to the routing protocol that were changed by the user when modifying the component tree,

wherein the router utilizes a real-time operating system and one of the attributes indicates a priority of a dynamic routing protocol designated router election for a local network.

14. (Original) The computer readable medium of claim 13, wherein the hierarchical component tree includes attributes that store values relating to the routing protocols and components that represent functionality of the routing protocols, the components containing one or more sub-components or attributes.

15. (Original) The computer readable medium of claim 13, wherein the first command is a display command.

16. (Original) The computer readable medium of claim 13, wherein the second command is a set preference command.

17. (Original) The computer readable medium of claim 13, wherein the user inputs the first and second commands via a command-line interface.

18. (Original) The computer readable medium of claim 13, wherein the user inputs the first and second commands via a graphical interface.

Claims 19 - 21 (cancelled).

22. (previously presented) The router of claim 1, wherein one of the attributes relates to a physical connection used by the interface component, and has values indicating networks.

23. (previously presented) The router of claim 1, wherein one of the attributes describes a cost to transmit a packet to the interface component.

Claims 24 - 25 (cancelled).

26. (previously presented) The method of claim 7, wherein one of the attributes relates to a physical connection used by an interface component of the router, and has values indicating networks.

27. (previously presented) The method of claim 7, wherein one of the attributes describes a cost to transmit a packet to an interface component of the router.

Claims 28 and 29 (cancelled).

30. (previously presented) The computer readable medium of claim 13, wherein one of the attributes relates to a physical connection used by an interface component of the router, and has values indicating networks.

31. (previously presented) The computer readable medium of claim 13, wherein one of the attributes describes a cost to transmit a packet to an interface component of the router.

Claims 32 and 33 (cancelled).

34. (new) A router, comprising:
a routing component that implements IP routing protocols for data processed by the router, wherein a workstation functions as the router via

the IP routing protocols; and

an interface component for a user to view and modify features of the router in real-time, wherein the router utilizes a real-time operating system, the interface component displaying the features of the router to the user as a hierarchical tree having attributes that store values relating to the IP protocols and components that represent functionality of the IP protocols, the components containing one or more sub-components, the attributes being modifiable within a single initialization of the router, one of the attributes specifies how often the router should contact neighbor nodes in order to maintain a live connection, and the hierarchical tree displaying the attributes, the components, and the subcomponents to the user.

35. (new) The router of claim 34, wherein one of the attributes relates to a physical connection used by an interface component of the router, and has values indicating networks.

36. (new) The router of claim 34, wherein one of the attributes describes a cost to transmit a packet to an interface component of the router.

37. (new) A method comprising:

implementing IP routing protocols for data processed by a router, wherein a workstation functions as the router via the IP routing protocols;

organizing features relating to routing protocols of the router into a hierarchically formatted component tree, the features including attributes that

store values relating to the IP routing protocols and components that represent functionality of the IP routing protocols;

displaying a portion of the hierarchically formatted component tree to a user in response to a first command from the user, wherein the hierarchically formatted component tree displays the attributes, the components, and sub-components of the components;

modifying the component tree in response to a second command from the user, the attributes being modifiable within a single initialization of the router; and

updating, in real-time, features of the router relating to the routing protocol that were changed by the user when modifying the component tree,

wherein the router utilizes a real-time operating system and one of the attributes specifies how often the router should contact neighbor nodes in order to maintain a live connection.

38. (new) The method of claim 37, wherein one of the attributes relates to a physical connection used by an interface component of the router, and has values indicating networks.

39. (new) The method of claim 37, wherein one of the attributes describes a cost to transmit a packet to an interface component of the router.

40. (new) A computer readable medium containing instructions for execution by a processor, the instructions, when executed:

implementing IP routing protocols for data processed by a router, wherein a workstation functions as the router via the IP routing protocols;

organizing features relating to routing protocols of the router into a

hierarchically formatted component tree, the features including attributes that store values relating to the IP routing protocols and components that represent functionality of the IP routing protocols;

displaying a portion of the hierarchically formatted component tree to a user in response to a first command from the user, wherein the hierarchically formatted component tree displays the attributes, the components, and sub-components of the components;

modifying the component tree in response to a second command from the user, wherein the attributes are modifiable within a single initialization of the router; and

updating, in real-time, features of the router relating to the routing protocol that were changed by the user when modifying the component tree,

wherein the router utilizes a real-time operating system and one of the attributes specifies how often the router should contact neighbor nodes in order to maintain a live connection.

41. (new) The computer readable medium of claim 40, wherein one of the attributes relates to a physical connection used by an interface component of the router, and has values indicating networks.

42. (new) The computer readable medium of claim 40, wherein one of the attributes describes a cost to transmit a packet to an interface component of the router.